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NONTRADITIONAL RESEARCH

Why Are We Talking Inside?:

Reflecting on Traditional Ecological Knowledge (TEK) and Management Research

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In this article, I utilize semifictional dialogue as a means of reflecting on my Ph.D. research on traditional ecological knowledge (TEK). Although my findings were ultimately published in The Academy of Management Journal, *the research, defense, and publication process raised a number of interesting issues, including ambiguities and miscommunications that emerged when I tried to communicate and share my findings with academic and business audiences. These reflections are presented in a creative semifictional format that privileges the dialogical basis of Indigenous oral tradition and storytelling. By using this medium, I hope to deepen our understanding and appreciation of TEK as an interesting ecologically embedded approach to management and also to raise and reflect on the validity and implications of using this type of ethnographic representation within organizational research.*

Keywords: *semifiction; narrative; Indigenous peoples; traditional ecological knowledge (TEK); ethnography*

I moved to James Bay in the fall of 1995. Just before "Moose Break," with only a mild wind, I arrived in the subarctic before the snow came. My ex-husband Barry had been teaching in the local Cree village since early August, and I moved there in solidarity and as a management ethnographer in training. When I arrived, I did not have a precisely defined Ph.D. research question, yet I was confident that something would emerge from the field (Hammersley & Atkinson, 1995). I perceived this to be the start of a great learning adventure. I was not disappointed.

Unexplored by most Canadians, James Bay is a land of boreal forest, muskeg, and long expanses of

AUTHOR'S NOTE: I would like to pay special tribute to my Ph.D. supervisor, William H. Cooper, who encouraged me to take risks and pursue my dreams while at the same time pushing me farther than I had wanted to go. The genesis of this article came from him. Many others contributed in a substantive way to this article. I would also like to thank Barry Cowell, Freddy Jolly, Lillian Diamond, Richard Preston, José Barreiro, Alan Richardson, Ida Berger, Merv Daub, John Dowling, D. D. Monieson, Norman MacIntosh, Peter Taylor, Fikret Berkes, Carolyn Smart, Lady Tinor, Steve Taylor, Monika Winn, three anonymous reviewers at the *Academy of Management Journal*, Sandra Robinson, and two anonymous reviewers at the *Journal of Management Inquiry.* This article is dedicated to the crow.

JOURNAL OF MANAGEMENT INQUIRY, Vol. 13 No. 3, September 2004 261-277
DOI: 10.1177/1056492604268220

black spruce. It was, and still is, a place of rivers and lakes, of rapids, and of ice. For a large part of the year, there was snow and lots of it. I slowly learned that James Bay was also the place that the Cree call *Eeyou Astchee*—the people's land.

In time I discovered that the Cree have an interesting cultural approach to managing traditional pursuits such as hunting, trapping, and fishing. This management approach emphasized the role of the Cree tallymen who are senior hunters and managers of James Bay, a subarctic region in northern Canada. As I narrowed in on my topic, I eventually moved into a hunting camp and began to ethnographically study the tallymen as managers. I found that they relied extensively on traditional ecological knowledge (TEK) as an Indigenous framework for management (Berkes, 1999; Whiteman & Cooper, 2000).

TEK has been described by the natural resources literature as "a cumulative body of knowledge and beliefs, handed down through the generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment" (Berkes, 1995, p. 100). Literature and my fieldwork indicated that TEK emerges from firsthand extensive interaction with a local ecology, on which the Indigenous manager lives and depends. It can also be passed down across generations of managers through story and apprenticeship. Although traditional ecological knowledge systems encompass management knowledge, beliefs, and practices (Berkes & Henley, 1997), TEK is different from most Western conceptualizations of management (Deloria, 1992), and the Cree approach to management is ecologically embedded (Whiteman & Cooper, 2000). Indigenous spirituality is also a fundamental element of this management approach (Berkes & Henley, 1997), and Cree hunters engage in an ongoing dialogue with their ancestors, with nonhuman ecological actors such as animals, as well as with entities that Western culture may deem inanimate (e.g., wind, rocks, ice, water).

My research developed a rich ethnographic description of this TEK-based approach to management. It was an unusual choice for a Ph.D. topic. Despite its promise and novelty, few management scholars had studied Indigenous peoples (for exceptions, see Egri, 1997; Moore, 1998; Weick, 1979, pp. 262-263), and none with firsthand ethnographic data. During my research, Ph.D. defense, and the publication review process at the *Academy of Management Journal (AMJ)*, I struggled with many ambiguities surrounding this new domain. It was not a straightforward task to share my emergent knowledge. In addition, my textual strategy within the dissertation deviated from the standard academic prose, and a more creative approach emerged from the field: I incorporated poetry, story, and visual narratives in addition to more typical academic-styled discourse (see Whiteman, 1997, for some of my examples of poetry from the field). Although I believed strongly that I simply could not have created my ethnography without such expressions, I acknowledged that this approach also raised certain questions for my examining committee.

In this article, I utilize semifictional dialogue as a means of reflecting on my research. The concluding chapter of my Ph.D. was, in fact, a dialogue—the basis for this article where I rely on real and fictional dialogue as a vehicle to explore a number of questions about the implications of my Ph.D. dissertation—what would happen if we took TEK seriously? How would management scholars or business executives react to a discussion of TEK? Could they, would they, take TEK seriously? Furthermore, what are the conceptual problems or hurdles that must be overcome to incorporate TEK into modern management theory and practice? The following work is based on 18 months of ethnographic work with the James Bay Cree from 1995 to 1997 as well as 2 years of data analysis and discussion, including my Ph.D. defense in November 1999, and culminating in a publication for *AMJ*'s Special Millennium Issue in December 2000.

These reflections are presented in a creative semifictional format that privileges the dialogical basis of Indigenous oral tradition and storytelling (e.g., Preston, 1975). By using this medium, I hope to deepen our understanding and appreciation of TEK as an interesting ecologically embedded approach to management and also to raise and reflect on the validity and implications of using this type of ethnographic representation within organizational research.

Before the dialogue begins, I include a discussion on methodological issues inherent in a semifictional narrative as well as some potential implications of this narrative strategy below. These issues are also addressed within the dialogue itself.

Reflections on Methodology, Data Representation

> Fiction is like a spider's web, attached ever so lightly perhaps, but still attached to life at all four corners.
>
> —Virginia Woolf (1929/1992).

In the dialogues, Plato (1953) demonstrated the art and value of philosophic discussion, of the necessary use of conversation as a tool for higher learning. Similarly, Indigenous peoples also speak to the value of storytelling and the power of the powwow—a dialectical and circular means of getting at the roots of an important issue. According to acclaimed native writer, Leslie Marmon Silko (a Laguna Pueblo; n.d.): "That is one of the strengths of the [Indigenous] narrative tradition: it oversimplifies to break things apart, to fragment but the truth remains comprehensible, in beautiful patterns, in a beautiful way" (n.p.). Thus, by emphasizing storytelling, Indigenous oral traditions do not attempt to abstract knowledge away from personalized human experience. Knowledge therefore maintains its emotional and personalized content in a dynamic fashion.

Similarly, management scholars are increasingly exploring the validity of storytelling and creative narrative in management research (e.g., Barry, 1996; Boje, Fitzgibbons, & Steingard, 1996; Czarniawska, 1998, Czarniawska-Joerges & Guillet de Monthoux, 1994; Knights & Willmott, 1999; Phillips, 1995; Taylor, 2000). Czarniawska (1998) explained that

> Narrative enters organizational studies in at least four forms: organizational research that is written in a storylike fashion ("tales from the field," to paraphrase van Maanen, 1988); organizational research that collects organizational stories (tales of the field); organizational research that conceptualizes organizational life as storymaking and organizational theory as story reading (interpretive approaches); and as a disciplinary reflection that takes the form of literary critique. (pp. 13-14)

Phillips (1995) also encouraged us to use novels, stories, plays, songs, poems, and films as legitimate objects for study and as vehicles to convey valuable organizational information that can enrich our field.

A dialogical narrative approach was well suited to my field site. The Cree are a storytelling culture: Personal narratives help define Cree culture, convey important information, and are a primary vehicle for individual learning (Preston, 1975). Stories are thus a creative means for meaning making and privilege contextualized information and personalized expression. As Preston (1975) noted

> Cree individuals often do not convey explanation in the form of simple, single facts, preferring instead to converse about events in narrative form. The context of narration (as contrasted with isolated facts) functions to convey to the hearer a whole and *precise* perception, sometimes almost a visual image, within the appropriate, inherent context. By conveying facts within their own context, then, the Cree attempt a precise understanding; or, on the negative side, prevent distorted or incomplete understanding. (p. 10)

Cree culture accepts the shifting nature of story (Preston, 1975). Truth, then, is not contained in a fixed format; instead, it emerges with an organic characteristic in a shifting and dynamic world. Thus, the creative role of ethnographer as storyteller is particularly appropriate in this culture.

However, what sets this text apart is its semifictional quality. In general, most fictional narratives that are studied by organizational researchers are not actually authored by the scholars themselves. Instead, our fictions tend to be written by people external to the scholarly writing process (e.g., organizational participants, literary authors, and so on). The use of fictional accounts that are created by the researcher(s) themselves remains unusual for management studies (see Jermier, 1985, and Taylor, 2000, for exceptions). The use of semifictional self-authored accounts is also rare, particularly with ethnographic work where tales from the field are more typically in the realist, impressionistic, or confessional genres (van Maanen, 1988). However, as Czarniawska (1998) pointed out, "There are no structural differences between fictional and factional narratives, and their respective attraction is not determined by their claim to be fact or fiction" (p. 5). Entrenched social conventions seem more likely to be the cause of such separation within organizational studies (Phillips, 1995), and many scholars have recently collapsed these artificial boundaries. Nevertheless, although scholars may now freely study fiction, they rarely create it, and even more rarely do they mix fact and fiction together into a collage, without carefully footnoting the differences (see Czarniawska, 1998, p. 63, Footnote 2).

By offering a semifictional dialogue based on ethnographic fieldwork, I have attempted to break away from a rational and creative cage that I felt restricted and overly directed interpretation toward either facts or fiction. I suggest that this type of prose has the potential to increase reader empathy because it relies on emotional and intellectual intersubjectivity (Carrithers, 1990) that is potentially powerful because of its purposive combination of facts and fiction. In general, creative ambiguities invite greater reader response (Richardson, 1994) and expand a work's potential meaning, and because "they provide a space

for the reader to enter the story and vicariously experience the events portrayed . . . [and] as fictions they are tremendously flexible" (Phillips, 1995, p. 671). The factual dimension of this narrative may also help ground textual messages and encourage readers to gain a greater understanding of TEK as a serious topic for management.

Academics from other fields already acknowledge the complementary power of semifictive forms of creative expression. For example, Agar (1995) pointed out that new journalism (e.g., Wolfe, 1973) is an established journalistic tradition, an approach that allows the journalist to place facts in fictional form. A journalist uses this approach to "convey the immediacy of experience and give it coherence and significance" (Agar 1995, p. 116), a textual quality that neither technical nonfiction nor creative fiction alone can usually convey.

This is not to argue that a so-called realist tale from the field (e.g., Whiteman & Cooper, 2000) does not have academic value. Rather my reliance on a semifictional ethnographic tale is an attempt to creatively convey the many ambiguities and differing perspectives on the value of TEK for management studies, which can be read in addition to the original realist version. A fully fictive story of my ethnographic field work is also possible but seemed unnecessary and somewhat misleading in that it would cause me to ignore important realities that I experienced while in the field.[1] Thus, by offering this style of dialogue, I hope to convey deeper insight into the implications and concerns about traditional ecological knowledge as a framework for management and also the role of semifictional writing (created by the researcher) within organizational studies.

Nevertheless, a controversial aspect of a semifictional narrative in organizational research may be whether or not it can be trusted ethnographically. In *Representations in Ethnography*, Van Maanen (1995) provided the following insights:

> Because I have come to regard the breakdown of standard ethnographic topics, borders, and styles as something to celebrate, not mourn, I cannot take a very hard line on this matter. Suffice it to say that a text is axiomatically an ethnography if it is put forth by its author as a nonfiction work intended to represent, interpret, or (perhaps best) translate a culture or selected aspects of a culture for readers who are often but not always unfamiliar with that culture. (pp. 13-14)

Van Maanen is not saying that ethnography is nonfictional work; rather that it is sincerely put forth as nonfictional, or is symbolically nonfictive. However, what if a research text, such as this one, is put forth sincerely and symbolically as semifictive? Can it be convincing? Furthermore, what are the implications of this approach to knowledge representation (for this article and for organizational studies in general)?

At a basic level, any ethnography is a work of creative prose (Van Maanen, 1988). As Reissman (1993) pointed out, "Storytelling, to put the argument simply, is what we do with our research materials and what informants do to us" (p. 1). However, as McLuhan (1967) aptly noted, the choice of the medium, in itself, conveys a message.

Golden-Biddle and Locke (1993) proposed that an ethnographic text convinces through strategies of authenticity, plausibility, and criticality. Furthermore, textual meanings are dependent strongly on interpretations made by readers (Rorty, 1991), often cued by such strategies. A semifictional ethnographic narrative attempts to deliver most strongly on the criticality dimension of convincing ethnographic texts—it breaks through the standard format of nonfiction and fiction to provoke readers to reexamine their beliefs and assumptions about research and the world (Golden-Biddle & Locke, 1993). Some parts of the dialogue do speak towards both authenticity and plausibility. While it remains purposively unclear which parts of my dialogue are "fact" and which parts are "fiction", the use of socially accepted symbols of fact, such as the *AMJ* publication, provides readers with clues about the authenticity and plausibility of my research on TEK. The personal and autobiographical disclosure in the dialogue may be useful to the story in at least two ways: (a) They help establish the nontraditional nature of the dialogue (by giving a behind-the-scenes look at the main character) and (b) by acting as a strategy for authenticity. Although I don't actually say whether these personal facts are true, they creatively add depth to the narrative.

My use of a semifictive setting—an imagined Ph.D. defense (which is nevertheless a familiar factual setting for most readers)—is also an attempt to add plausibility and, at the same time, criticality. Despite the fact that a defense is a familiar occurrence to most readers, events unfold in somewhat unfamiliar ways. The use of recognizable modes of academic argumentation in the dialogue has a similar role, which may challenge taken-for-granted assumptions about the

academic arena. The rhetorical device of dialogue itself may help to increase plausibility and criticality because it encourages readers to actively engage in similar questioning in an explicit yet unresolved way. Some of the issues raised in the critique are purposively not fully resolved or agreed upon, thus raising creative and possibly intellectual tension. Incoherence and implausibility, of course, are the potential downside of such creative ambiguity (Golden-Biddle & Locke, 1993).

How then should a semifictional ethnographic narrative in organizational studies be evaluated? Czarniawska (1998) reminded us that "'narratives *exhibit* an explanation instead of demonstrating it," and an effective narrative is one that resonates with the reader (Ellis, 1993). Golden-Biddle & Locke (1993) suggested that, to be convincing, an ethnographic text must at minimum achieve authenticity and plausibility. A semifictive ethnographic account has the potential to deliver on each of these. Ultimately, the proof is in the pudding. Read on and let's see what you think.[2]

RESEARCH FINDINGS AND REFLECTION: THE MULTIPART PH.D. DIALOGUE

Before the dialogue, there was a heated discussion on an early draft of her Ph.D. dissertation. In an e-mail dated in early May 1999, her supervisor had written,

> The creative parts of the dissertation are very good. The stories and poetry are frequently moving. Some brought tears to my eyes (OK, just the one). The discursive and academic parts are not good. They are flat and repetitive and general and not engaging at all.

At the time, her supervisor had written of his disappointment and said, "I am asking you to be an academic for two months. Leave the stories and poetry and photos alone."

When the woman received this e-mail, she had been shocked. She had tried to be an academic now for 6 years. It was a long time, and she was tired. Her father was ill, and she was tired. She had no more money, and she was tired. She knew that she had worked really hard. She was tired—but more important, she knew that she had discovered some really interesting things. Her supervisor's comments hurt, and this made her snap. Her supervisor replied, "Stop acting like a victim." When the woman received this e-mail, she had cried.

She had not understood. She could not understand how there could be no academic value in her 300 pages. She did not believe this. However, her supervisor wanted a major rewrite. They also bickered about who to have as the external examiner and finally settled on two: an anthropologist who was an expert on the Cree and an Indigenous academic from Cornell. They argued about the need to read the latest work on population ecology. She was at the point where she thought nothing had any value.

Finally, in person, he had said,

> Write the last chapter first. Why not write it as a series of voices, a conversation about what would happen if we take Traditional Ecological Knowledge seriously . . . ? Do you remember Walter Nord's (1985) piece in that Cummings and Frost book?

She didn't. However, when he gave her the book she read it through and thought, Oh! She hadn't realized that her supervisor would actually push her this hard. For the first time, she panicked. *My god, he wants me to be good enough to be in* The New Yorker! To say that this made her uncomfortable was an understatement. *I cannot do it*, she thought. *Well, you have to do something*, her practical side told her. The last chapter was missing. Her supervisor was right.

She started writing again, "For this exploration, I ask you to imagine a Ph.D. thesis defense in the Management Program of Queen's University."

Pip looked around the room. It was large and beige with the latest technology. She did not like it. She stood near the window and looked out at the wind. She looked out at her dog Eco sleeping under a nearby tree. It didn't make her feel any better.

Slowly, the room began to fill. The rules for the defense had been opened—anyone could talk, ask questions, after Pip had made her opening gambit. It was not a closed defense. There was also a speakerphone on a table with a long-distance connection to a retired professor in England. He was the first person to introduce her to ethnography, and she was glad he could tune in.

Bill, her supervisor, sat in front near the left corner. He ignored her. A few minutes later, some students arrived along with the external anthropologist and some committee members. A mathematician from outside the department also slipped in the back. Finally, the external examiner from Cornell arrived and sat at the front. Then a crow settled on the windowsill, black and singularly edgy.

Pip knew that this was the signal. The cast had finally assembled. But to postpone the inevitable, she turned and opened the window. She let some fresh air in and shivered slightly. It was early November in Canada. The crow began hopping on the outside ledge. It looked at her sharply. She nodded and then began, "I do not have many things to say but I am looking forward to hearing what you have to say." She paused, wondered if this was true, decided that it was and continued, "For me, this dissertation has been an epiphany."

She paused for a sip of water.

> "When I first arrived in James Bay, I did not realize that Cree hunters, particularly the tallymen, were sophisticated managers. They didn't fit my preconceived notions of what a manager is. During my fieldwork, I realized that I had a preconceived (and prejudiced) notion of a manager as someone who worked in an office building, who wrote strategic reports, and networked over lunch downtown. But over time, I realized that there are many kinds of managers and that the Cree have an ecological approach to management, one that is embedded in their local environment. I also believe there is much we can learn from this approach. Consequently, my dissertation seeks to make one key contribution: to empirically describe the tallyman's approach to management focusing on the ecological embedded dimensions of their management practice."

Quoting Berkes (1995), Pip continued,

> "Traditional ecological knowledge (TEK) has been defined "as a cumulative body of knowledge and beliefs, handed down through the generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment." TEK focuses on the complex relationship of all living beings with each other and the environment. Indigenous systems of knowledge such as TEK are not separated from management practice but are intrinsically intertwined. Consequently, TEK can be viewed both as an Indigenous approach to management as well as an information base from which decisions are made."

Pip put up Figure 1 on the overhead machine. "Traditional ecological knowledge is a management system," she said.

> "A system that is a mixture of management knowledge, beliefs, and practice. These three elements operate in an iterative and holistic system that emerges over time, and across generations, and are embedded in the lived experience of traditional pursuits, in activities or ways of life that take place in the natural environment. In many ways, this approach is conceptually similar to business management systems. Such systems also incorporate management knowledge, beliefs, and practice. However, a key difference is that TEK is developed in accordance with local ecological needs whereas approaches to business management are often developed in isolation, or in accordance with the marketplace and then imposed upon the natural environment."

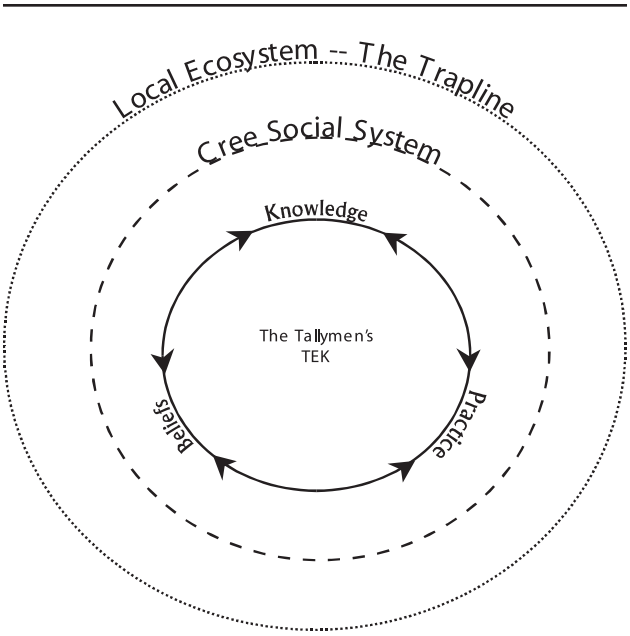


Figure 1: Cree TEK Is Ecologically and Socially Embedded.

Then she said, "But Figure 1 is actually misleading." With that comment, Pip stopped and looked about the room. She wanted to know if people were paying attention. They seemed surprised at the pause. Her supervisor looked at her questioningly.

> "What I mean is that Figure 1 is an abstraction, a two-dimensional sign that attempts to convey information about a management system that is rooted in an ecological reality. It cannot do so, and of course we all know that. However, I worry that in my attempt to discuss TEK as an abstraction, I actually reinforce the necessity of speaking about management in abstraction. Why show Figure 1 at all? Why not show you a mountain range or better yet, take you to the bush and say, here—this is TEK, the living, breathing, smelling reality of a small piece of intimately traversed ecology, trapline R-21? Learn about it as I have learned about it. However, instead, because of convention, we are here in this room, far removed from a biophysical experience with sustainable management (or with Indigenous managers), and I am stuck showing Figure 1."

There was a murmur in the audience.

"But surely Pip, we can all accept that a sign is a sign of something, and move on!" said one of the committee members.

"No, that's just it. A sign may be a sign but Figure 1, like most of our management theory and practice, has become decoupled from the natural environment even as it wishes to speak to it. In our academic culture, no, throughout our Western business culture, we have to speak about the natural environment through signs and not through experience. Our cultural grammar demands that we show the sign of the thing and not the thing itself, particularly if it involves being outside in the earth. The earth is not our office. But it is for the Cree! And I truly believe that the earth has a hard time being transmuted into signs that can fit within the realities of our offices and within the nonecologic language of our social interaction. The earth can't easily fit into the social abstraction of the marketplace. And I fear that the use of Figure 1 condones the denatured practice of management even as it wishes to bridge the gap between the biosphere and business."

She stopped. No one knew quite what to say.

"Ok Pip, you've made a point. But let's get back to the reality of today," said her supervisor. As usual, he was amazed at Pip's ability to almost talk herself out of her own dissertation. "Please continue." He was trying to protect her.

She smiled and started again,

"TEK is not an abstract creation of management theorizing. Traditional ecological knowledge is not static—it is a dynamic approach that emerges from practical management experience with a local environment, gathered across generations, including the current one. TEK is a manifestation of ongoing daily ecological management practice. Although dimensions of it may be discussed away from the ecosystem in which it was developed, we must be clear that the essence of TEK remains rooted in that very specific ecology. TEK is not simply a sign. TEK is survival on the land, successfully achieved over generations. TEK has retained its sense of what Livingston (1994) would call a sense of ecologic place—it has a biospheric and managerial reality. TEK is grounded in the earth and in the manager."

"Well Pip," said another committee member. "Perhaps in this way, Indigenous peoples have much in common with business executives—both are focused on concrete management approaches that work successfully. TEK seems to be exclusively practitioner oriented. It has none of the airy-fairy utopianism that those radical ecocentric scholars talk about!"

"True," said her supervisor, "But TEK is different from Western management practices and theories because the first has grown within the earth, while the latter has grown away from it."

"And there is no 'away'!" said Pip. "That's the trouble. Although Western management believes that it can remain removed from natural systems, this is a fallacy. There is no away!"

"Yes, well that's an overstatement. The field is changing," said Bill. "But I think that even ecocentric management scholars who may wish to go back to sustainable ways may miss the boat because they often start with philosophy, with abstraction, and not with living things."

"So TEK starts and ends with living ecosystems—it never moves away from this ecological base?," asked a grad student.

"Right," said Pip. Her supervisor nodded.

"Now Pip, can you please give us an example of TEK in action?" asked a committee member. "Help us understand what you're talking about."

"Sure," said Pip. "I can try. Let's see . . . The use and value of TEK can best be described by story. In fact, Cree people use story to convey important information about their management approach. Unfortunately, such conversations can easily be marginalized by business executives and management scholars."

Her supervisor grimaced. Pip continued,

"No, it's true. To illustrate this point, I want to offer a story of my own. Once when I was in James Bay, I was talking with my key informant, a Cree tallyman, who was telling me about his concerns regarding forestry. Freddy had a problem with the way the forestry company was replanting trees. He said to me, "After clear-cutting, when they plant the trees . . . it's the worst way to do it. Because when they plant a tree, I think it's going to taste different. Like when Porcupine eats it. . . . It's going to be a different taste. Freddy felt that the porcupines needed greater variety than such replanting programs would allow."

A number of people in the audience laughed quietly. The external examiner smiled.

Pip recounted how she originally had had a conceptual problem with the management value of porcupine taste buds.

"In fact, at the time," she said, "I rejected this story outright and felt that Freddy was being ridiculous and overly critical. Needless to say, Freddy got angry with me for rejecting his beliefs and knowledge. However, immediately thereafter, I read about the dangers of 'mono-culturing'—that is, when only one type of tree is planted, forest resilience was endangered (Jardine, 1994). Ecological science suggests that a forest requires a sophisticated mix of trees to ensure eco-

logical resilience. After reading this, it occurred to me that what Freddy was saying about porcupine taste buds was essentially the same message as the scientific knowledge conveyed in the article on mono-culturing. But I had rejected the tallyman's knowledge because it wasn't conceived of, or conveyed in a way that I perceived as appropriate—to me, porcupine taste buds were not a valid benchmark. But to Freddy, like many Indigenous peoples, this may be an extremely valid indicator, even as a metaphor. What I also learned from this story was that even though I was predisposed to the value of traditional ecological knowledge, when push came to shove, I had difficulty in appreciating its meaning, especially when it was conveyed in such a different manner."

Her supervisor nodded and looked at the group, "Questions?"

A hand shot up. It was from a committee member.

"So TEK is a method of getting local baseline data on environmental conditions? Is it focused on sharing knowledge about animal migration routes, habitat relationships, or maybe ice flow movements? I know mining companies have been trying to use TEK in environmental impact assessments in the north but it's pretty hard to benchmark."

"Of course, it's hard to benchmark! We shouldn't be trying to bench it!" said the crow.

The audience was surprised and thought they had misheard. Perhaps Pip had actually said this. Pip coughed and then said clearly,

"Peter Drucker (1986) defined management as a specific approach or practice to organize humans and other resources to effectively achieve a goal. Consequently, TEK can be understood as a complete management system, a system that has been successfully developed over thousands of years. It is more than an input into an EIA."

The crow cawed and shook her wings.

Pip continued,

"So what I'm saying here is that traditional knowledge is a management approach that is on an equivalent level with modern business management — it not simply a tool to gain baseline data, although that may be a useful function. If traditional knowledge is to effectively enter the boardroom, mining executives must begin to appreciate that TEK is a cultural management system that can teach them a lot — TEK is not only important to Indigenous peoples. It has value beyond providing guidance on hunting and trapping, or in generating baseline environmental data. In general, TEK can teach a number of principles for sustainable business management."

Pip put up Overhead #2.

TEK as a sustainable management approach: Key principles

- Humble pragmatism.
- Social/ecological reciprocity—the fundamental need to give back to society and the local ecology as you take from it.
- Managerial leadership is based on ecological legitimacy gained through high levels of TEK.
- Ecology is fused with economics, business with society, and self-interest with the needs of the community and the local ecosystem.

One of the committee members interrupted. "Actually," she said, "that's what surprised me the most. That TEK isn't simply about information, about knowledge. That it's really a complete management system on par, well, at least comparable with our own." Her voice trailed off as she pondered this silently.

Pip added, "So it's not an issue of . . . "

Then another academic jumped into the discussion, changing its direction completely:

"Well my dear, you've done a good job, but I really think that you could do just a little bit better if you related TEK to population ecology, resource-dependency theory, or all that work on stakeholders. I also think you must expand the literature on the tragedy of the commons, look closer at Hardin's (1968) work. . . . " He went on for a while.

"I suppose you're right," said Pip without enthusiasm. "But I really think that the purpose of this dissertation isn't to fit TEK into the management literature. TEK already fits in with what's important. TEK stands in the earth. The more we try to link it to theoretical constructions that have largely been developed in social isolation, the less TEK remains rooted in the earth. It becomes linked to abstractions."

"Yes," said the crow. "The tracks of the animals, that's our book!" A grad student went over and closed the window.

"Perhaps," Pip said sadly, "we can't have it both ways. But maybe we should try to look at this issue another way—how would TEK change our understanding of population ecology, stakeholder theory and resource-dependency theory, among others? I mean how could these theories be reworked so that a Cree tallyman would find them useful? Future research could look at how to take the classics of management literature outside."

Her supervisor went over and re-opened the window.

"Very interesting," said the anthropologist. "In most business settings, the natural environment is an abstract concept. Boardrooms are not set outside in the woods—in fact, such a physical location would seem odd to most of us. However, the de-natured setting of most offices may seem odd to Indigenous peoples. Unlike the barren nature of the boardroom, traditional ecological knowledge and Indigenous decision-making is rooted in the out-of-doors."

Pip concurred.

"That's because Indigenous managers spend a great deal of time working and living in the natural environment. It all has to do with where things actually happen. That's the physical location where management occurs. And Tyre and von Hippel (1997, p. 71) have found that a physical location can shape a manager's frame of reference, which perhaps may also apply to an ecological location."

"Maybe that's why Indigenous groups don't always show up at consultation meetings run by natural resource developers. I always thought they just weren't interested," said an environmental policy expert. People started nodding.

"But," said a committee member, "you can't expect business managers to actually appreciate the value of a porcupine's taste buds . . . I mean, get realistic! What about shareholders?!"

"I disagree, at least under certain situations," said Pip.

"Good business is about learning the cultures that you operate within. If you want to operate in Korea, you learn cultural protocol and norms for communication. If you want to operate on Indigenous lands, you must learn and appreciate their distinct approach to management and communication."

"Well maybe there is some merit if you link it to the stuff on joint ventures," he continued, "like understanding your partner's organizational culture and approach. This might be a useful contribution for mining companies who have to negotiate with aboriginal groups. However, there is an important hurdle still to overcome. In many cases, business managers demand scientific 'proof' before they can accept knowledge as valid."

"Look, I agree," said Pip. "I had problems accepting Freddy's TEK until it became validated by scientific studies on mono-culturing. However, this taught me something. Traditional ecological knowledge doesn't recognize or accept the Western need to demonstrate the scientific value of their knowledge and management approach. Instead, TEK already relies on cultural tradition, hundreds or thousands of years of trial-and-error practice, and yes, faith, to validate management approaches. Do we actually need to scientifically substantiate TEK when Indigenous peoples have already spent time empirically testing this knowledge? Does it need further validation?"

"Perhaps. Perhaps not," said her supervisor. "But I do like the idea about accepting uncertainty in management knowledge. I've always liked that quote from your fieldwork: 'If you're meant to know, in time you will. . . . Even if you're told you might not understand."

"But, what about other companies?" said the accountant. "Pip you're not restricting the value of TEK to just those companies who are operating on Indigenous lands. You seem to be suggesting that TEK has value as a sustainable template for business managers, regardless of their industry."

"Yes, yes I am suggesting that."

"But you haven't demonstrated that TEK is sustainable. You haven't shown that it works."

"Well Berkes has. He's already shown that Cree approaches to the Chisasibi fishery were sustainable over a long-term period. More work is needed to expand this but there is already data to support the sustainability of Cree practices. See Berkes, 1995, or 1999."

"Sustainable in terms of subsistence, perhaps," said the accountant. "Or perhaps not. What about all of those mistakes that Indigenous people made—aren't they as much to blame for environmental degradation as we are? Do you know Krech's (1999) work—it totally refutes your main point. You are working with a myth."

"Yes, well . . . Krech and others do point out how Indigenous peoples have exploited parts of the natural environment, sometimes severely. But I think the point is not that the Cree, or any other group, are perfectly sustainable managers. Rather, Berkes makes the point that it's how a culture learns from mistakes or from unsustainable behavior and incorporates this into its cultural stories about management as well as actual management practice."

"I don't know," he replied. "I suppose the next step is to see what aspects of the tallyman's approach can be applied in a modern management context."

"Fine. Fine. All good points. But I think the whole thing has to be tightened up intellectually," said the economist. "I mean stories are fine but what of academic discourse? Don't you think that your informality leaves something to be desired?"

"Well, yes, if I was playing Herman Hesse's (1934/1969) glass bead game." Her supervisor shook his head but she continued anyway. "But I'm not. Anyway, Van Maanen (1995) suggested that 'the breakdown of standard ethnographic topics, borders and styles [is] something to celebrate, not mourn,' see page 13 of *Representation in Ethnography*." Pip then turned to *Knowledge and Persuasion in Economics*: "On page 37, McCloskey (1994), an economist, says that: 'The poet and classicist A. E. Housman noted of textual criticism that "accuracy is a duty, not a virtue"'"

At that point, the mathematician piped in,

"'In mathematics, too, logic is a duty, not a virtue. The mathematical idea is the virtue.' I believe that's how she finishes that quote."

Pip was impressed. The man continued,

"So what you're saying Pip is that we should be examining the idea of TEK and not bickering over the duty of this particular form with this particular substance? You may be on to something. But," said the mathematician, "you might be more diplomatic. Also, you can't really side step the issue of form and substance by implying it's all just rhetoric anyway. Although you would like to, you can't. You've chosen a different form, so you have to expect a discussion and some challenge about this. . . . Also, am I right that the inclusion of this story, of said final chapter, is relevant only to the effect on the reader? If this is so you should point that out. Or, are you trying to convey additional information or a deeper appreciation of the implications of TEK?"

Pip started to enjoy herself. She had always liked the mathematician.

"Well, I guess you're right. I need to be more explicit about why I include my stories and the photographs, about why the last chapter, this dialogue, exists at all. I think that it exists for more reasons than just to demonstrate what Golden-Biddle and Locke (1993) described as the 'criticality' of texts. I think this dialogue on TEK can hash out some additional dimensions or a deeper appreciation of TEK. Sort of like what Gaarder's (1996) *Sophie's World* does with philosophy, though on a much smaller scale."

The mathematician nodded and continued,

"Ok. Fine. The last chapter has meaning for the reader. However, is it also true that for the writer (in this case you), the last chapter has additional value? Aren't you suggesting that it is important for researchers, in general, to be engaged in related creative work (story writing, painting, music, etc.) while doing their research? In effect, that such creations will help to produce better or at least richer findings?"

"Yes, I think I'm saying that."

"But then is this chapter really just the scaffolding required to build the building? You may have worked hard on the scaffolding and be quite proud of it, but does that mean you should leave it up against the finished building for everyone to see how in fact the thing was done? Should you have it in the final version of your dissertation? Is there not a danger that it will get in the way? Maybe what I say is not true, but whether it is or isn't, well it's important to point this out."

Pip thought for a moment and then elaborated,

"Perhaps we are in a time of transition. Perhaps we need to show the scaffolding, the last chapter, so that a new form, a new way of presentation can be followed and examined in its process."

Another committee member added in:

"Pip you're not the first to argue for alternative forms of narrative representation in organizational studies. Why don't you build on Czarniawska, try 1998 or some of her earlier work. Phillips (1995) also explicitly challenges the usual demarcation between fictional narratives and academic writing, or try Astley's (1985) discussion of organizational research as 'storytelling.'"

Pip was slightly surprised. Although she knew many things about Nelson, perhaps she didn't know the most intriguing. She felt inspired that there were more obvious links within organizational studies than she had previously identified.

"Good point," she said. "Maybe I can use these building blocks to justify my use of story and visual narratives. Also I know that Wolcott (1995) argued that an ethnographer has the broad responsibility to contribute to the development of new methodological techniques (new ways of knowing) in addition to making substantive contributions. But getting back to the McCloskey tie-in, perhaps we won't need scaffolding when we no longer have such rigid delineations between art and science, when we can accept, that 'the very distinction between form and substance is a modern myth, useful as myths sometimes are, but not to be elevated to a plan for the universe,' see McCloskey, page 35."

"Let it go Pip," said her supervisor suddenly. "Your old fears are peeking through. Why do you always think that we are so stuck on the need for conventional text? Can't you believe that Queen's University is able to run the risk of a nontraditional dissertation or a nontraditional chapter? Using scaffolding is fine, but let's look at the building or the idea behind both the building and the scaffolding. Let's get back to TEK. What would happen if organizational studies took native approaches seriously?"

"OK," said Pip. "Let's talk about this. Let's talk about the ecological embeddedness of TEK. Ecological embeddedness is something new to the management literature. And I think my findings demonstrate a number of interesting characteristics of the tallyman's approach."

Overhead #3:
Common Characteristics
of Ecological Embeddedness

- The location of management is outside.
- The style of management can be described as "management by walking outside."
- Management practice is governed by beliefs of ecological respect, reciprocity and care taking.
- There is a strong emphasis on gathering ecological information and relying on ecological sense making in management.
- The tallymen have a belief that management wisdom comes from the land and have a personal sense of their own ecologic place.
- TEK leadership is based on the degree of ecological legitimacy of possible candidates.

A professor who was an expert on environmental policy jumped in:

"But what does any of this have to do about management and organizations? I mean you're not actually suggesting that we all move back to subsistence living?!"

"That's not what I'm suggesting," she replied. "I have simply tried to describe what Cree management is like. I think that's a contribution in itself. Just like how in the past business scholars have studied Japanese approaches to management."

He cut her off,

"But that didn't work! That was all bullshit! Are you saying that you're just doing the same sort of garbage?!"

Pip winced. She took a sip of water and then said,

"Just because the conclusions and implications of Japanese management didn't pan out, doesn't mean that it wasn't an appropriate or useful topic of study. An empirical description of a cultural approach to management is valid, if you can cut through the bullshit."

"And have you?" said a grad student. Pip wasn't sure but continued, "What I will suggest, as a corollary, is that Indigenous approaches are different from modern Western management, in a number of important ways. And furthermore, that I think that Western management can learn a lot of useful lessons from the tallyman."

"How?" said a committee member, "Are any companies hiring tallymen? Could you ever foresee that?" It was not meant unkindly.

Pip looked about the room. No one met her eyes. She sighed,

"Well obviously, that's not something that's happening. But there is a growing interaction of TEK managers and business managers. For example, in the north of Canada, there are comanagement agreements between companies, governments, and tribes, which establish comanagement boards made up of Western and Indigenous managers, sort of like the tallyman."

"Yes," said the anthropologist. "But even Falconbridge (1998) or Placer Dome Inc. (1998), which have formally acknowledged the value of TEK . . . they haven't gone far enough and are still critiqued by NGOs and Indigenous peoples. Understanding traditional ecological knowledge from a business perspective is not easy. In fact, even progressive mining companies tend to view TEK in a narrow manner. For example, with the Raglan Agreement signed by Falconbridge, the Inuit were able to protect migration patterns and thus were better able to continue their traditional pursuits in the north. Falconbridge's mining operations were less detrimental than if the company had not acknowledged the importance of traditional knowledge. Yet if we take what Pip is saying seriously, then however beneficial, this philosophy is still limited in a number of key respects. Any comments Pip?"

"Well, for instance," she said, "a company like Falconbridge views traditional knowledge as important to mining in terms of providing information on the local ecology and local culture. These are important issues certainly. But a philosophy on traditional knowledge can go farther and recognize that TEK can provide important lessons to mining companies as they struggle to find a template for sustainable management."

"And what about Placer Dome then? Aren't they doing something with TEK?"

"Yes," said Pip. "But their Sustainability Policy (1998, p. 3) provides another example of a progressive company with a narrow view on traditional ecological knowledge. Specifically, Placer's policy states that the company will 'recognize and respect the importance of the land, and traditional knowledge to local Indigenous or aboriginal communities and be sensitive to their culture distinctiveness.' Although Placer Dome should be congratulated on formally incorporating traditional knowledge into the level of corporate policy—an achievement that few other companies have met—the company could benefit by recognizing that TEK offers many important lessons for sustainable management."

"Nevertheless," said Bill, "at this stage, even within the mining industry, there appears to be little formal recognition that TEK has value as a distinct yet equivalent management approach that could be utilized as a template for sustainable business."

"And what about all the other corporations? What do you have to say to Peter Drucker or Henry Mintzberg? (1973) You cite them don't you?" said the economist.

Pip swallowed and then said,

"I mean, it's an empirical question isn't it? A good question for future research. I mean, what would happen if Rio Tinto or Hydro Québec or IBM for that matter started to incorporate some of the dimensions of TEK into their management systems? What would happen if they started to institutionalize ecological reciprocity or ecological legitimacy as a criterion for leadership? What would happen if managers just started to physically relocate into the natural environment? Would business management change if managers were outside, living and working and existing within the biosphere of their organization, if they had to physically experience the environmental byproducts of their actions? Would it make a difference? I don't know. However, it is researchable, if a company would go for it, if Drucker or Mintzberg or someone else would choose to study it. In the meantime, and while I don't know, I do think that it would change the way we do business," she said.

"Can you be more specific Pip?" asked a committee member.

"Yes, I can. I suggest that TEK is not only valuable to mining companies in areas in which there are Indigenous peoples. Traditional knowledge, as a general management approach, may be valuable to many companies throughout their operations. In this vein, I offer the following propositions for future research on ecological embeddedness:"

Overhead #4:

- "Proposition 1. Managers who have a strong personal identification with local ecosystems (a sense of being a place) have greater commitment to sustainable management practices, than managers who are less ecologically embedded.
- Proposition 2. Managers who believe in ecological reciprocity, ecological respect, and ecological care taking are more likely to be committed to sustainable management practices than managers who believe less in ecological reciprocity, ecological respect, and ecological care taking.
- Proposition 3. Managers who gather management knowledge through firsthand experience with local ecosystems develop a greater sense of being a place and have a greater commitment to sustainable management practices than managers who do not gather environmental information through experience.
- Proposition 4. Managers who are physically located outside in their local ecosystems develop a greater sense of being a place and have a greater commitment to sustainable management practices than managers who are physically located inside buildings."

"Interesting, Pip," said a committee member. "I think it's an intriguing set-up for future research. I'm not sure you will find anything to support your propositions, but it does help focus in on potential implications."

There were murmurings of assent from the crowd. Suddenly a voice from the crowd interrupted:

"How can you stand there and present the Cree as an ecological group? The Cree's way of life is self-oriented, not animal oriented, and their practice of trapping and killing animals is ecologically unsound. Hunting with guns destroys the natural order (so much has been written on this) . . . Also just try to refute Mason and Singer's (1990) work. . . . You discuss the Cree as though they are Buddhists, Hindus, or Jains who do not eat animals but value them, respect them and try to learn from them. The Cree do none of this—they are very Western in their approach. Thus the premise of the dissertation is false. This is not an ecological group."

Pip had thought that she could avoid the thorny issue of animal rights and hunting and trapping. Through the open window, Pip could hear Eco start to bark loudly.

She replied slowly,

"The Cree are a hunting, trapping, and fishing people. The boreal ecosystem will not sustain agriculture. If the Cree did not eat meat, they would not be able to survive in the local ecosystem. So, I don't think you can dismiss Cree TEK as nonecologic because they eat meat. However, you do bring up an interesting issue, the issue of humane trapping or hunting. In fact, I think the Cree agree with animal rights activists that they need to respect animals. However, they also believe that they need to rely on animals for their own survival. In return, they are taught to always treat animals with respect and to give back to the land, an entrenched form of ecological reciprocity. A dismissal of TEK on the basis of 'animal rights' is problematic. Indeed, Wenzel (1991) suggested that the discourse of the animal rights movement can be viewed as a continuation of the colonial process in Canada that attempts to 'change' or 'assimilate' native culture into a more 'progressive' Western (or Far-Eastern) ethic. To suggest that the Cree should not eat meat is to suggest they should become some other culture."

"I totally disagree," said the professor. "The Cree are also involved in sports hunting, and that is not about subsistence living. And what about the use of guns? That is not a traditional Indigenous tool; it comes from our culture. I think we would be better off looking at the TEK of the Eastern cultures."

"Good point," Pip conceded. "I think you're partially right. Some Cree are involved in sports hunting, and

some of this type of activity may transgress their own traditional laws. We need to explore how TEK and Cree culture learn from, or are distorted by, such activity. The question of whether the use of guns or traps, imported from another culture, into Cree traditional pursuits has also been debated in the anthropological literature. There is a strong argument that traditional Indigenous culture is not simply embedded in the use of specific technology or artifacts but rather in the cultural beliefs surrounding such activity. Thus, the Cree would say, and have said, that they are continuing their traditional ways even though they have incorporated external technology. However, I do agree that we should examine the TEK of other cultures, from Africa, Asia, South America, and Russia. Not all manifestations of TEK are with hunting cultures. More work needs to be done to see how agriculturally based TEK differs from hunting-based TEK. Does this help allay your concerns?"

The professor did not reply. Another committee member jumped in:

"Now what about spirituality in management, Pip? You've successfully avoided talking directly about spirituality thus far, but I would like you to comment on it."

"Well," said Pip. "Tanner (1979) demonstrates how Cree spirituality is intertwined with the bush and within a hunting culture. The tallymen in my study believed that the earth was engaged in an ongoing discussion with them. Freddy, my key informant, told me repeatedly that: 'The wisdom comes from the land.' Management knowledge and spiritual beliefs were fused, and were accessed and reinforced through daily management practice."

Someone else interjected:

"Are you suggesting that native people actually believe that the earth is talking to them? That it can teach sustainable management in some sort of conscious way?"

"Why not?" said her supervisor. "In the Gaia hypothesis, James Lovelock (1989) seemed to believe that the earth is a self-regulating system. Therefore, whether he adheres to conscious dialogue or not, he would certainly imply that human actions can be part of such ecological self-regulation."

Pip's supervisor turned and winked at her. Pip looked at the crow who was still on the ledge and then said,

"In many ways, modern Western business is anthropocentric—that is, we focus on the needs of humans and more specifically, on the needs of the marketplace. Environmental concerns often come second. In contrast, Indigenous peoples view nonhuman inhabitants as equally important participants in a local sustainable ecology. They do not understand why the 'needs of the beaver or the porcupine' are not perceived to be important by corporate executives."

The external from Cornell suddenly spoke up. He had been silent for some time.

"Certainly, as scholars, we can appreciate that traditional knowledge, at its very essence, is broadly ecologically based. Indigenous managers operate from a subjective and personalized understanding of the natural environment. They do not view the environment as an inert object waiting to be controlled. This really is a cultural difference."

"Yes," said Pip, "and unlike modern business approaches, Vine Deloria Jr. (1992) suggests that Indigenous managers adopt the 'idea that the natural world might have knowledge, feelings, and intelligence in and of itself' (p. 49). In contrast, 'modern' scientific understanding has often viewed the earth as 'inert.' Modern business also tends to hierarchically value 'natural resources' above the 'natural ecosystem' and ignores or undervalues 'nonutilitarian green spaces' and complex ecosystem relationships."

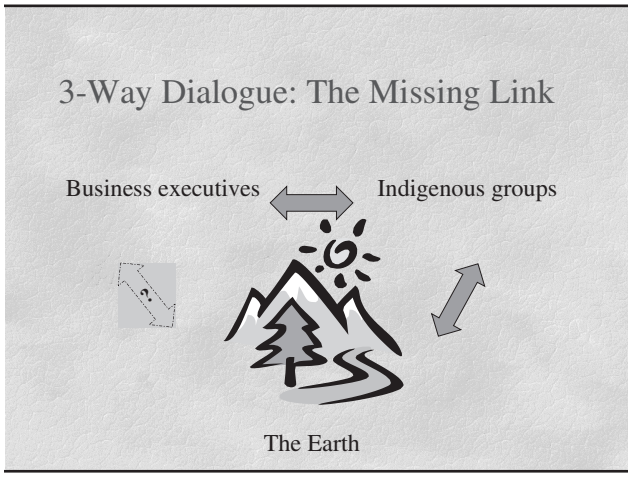
"Thus," said the anthropologist, "business decision-making tends to be anthropocentric and depends primarily upon human use-value with some mitigation of environmental impacts. In contrast, Indigenous approaches value the roles and relationships between all life forms and do not put human use-value at the centre—ecological relationships are valued, regardless of the degree of human interaction. Respect for living entities, and for their natural interrelationships, is a central tenet of traditional practices. Although some species (including humans) may dominate an ecosystem, the earth exists for the benefits of all living entities. The overall health of the system, and thus each species, is the managerial ethic of the Indigenous manager."

"But," said the economist. "If we took that approach, we would never develop a lot of important resources. How would the world get its energy or lumber?"

"I think that's still possible," said Pip. "For instance, Pecore (1992) and Wood and Dewhurst (1998) showed that the Menominee Tribe in northern Wisconsin have successfully practiced a sustainable approach to forestry over the past 140 years and have done so, in part, by adopting a long-term approach to future forestry activities, which includes a 150-year planning horizon. However, it remains to be seen how this type of approach could be utilized in larger economies. I think it's an intriguing area for future research. But getting back to the notion of dialogue. It may also be useful to note that dialogue with Indigenous peoples is not simply a two-way street. In fact, for most Indigenous peoples, effective dialogue must become a three-way discussion with the earth itself playing a leading role."

The external from Cornell nodded and said quietly, "Yes, I agree."

Pip put up overhead #5.



She said, "For the Cree, the earth is experienced as an active, living entity that conveys important management information—if the manager is willing to listen and learn. Indigenous peoples, in general, are continually attempting to listen to the earth and learn from their local ecology. In such situations, business executives would benefit by not only attempting to talk with Indigenous groups, but perhaps by starting a firsthand dialogue with the earth itself."

"Ok. So you're saying dialogue is important. But there are so many hurdles to overcome," said a committee member. "Cultural differences, lack of experience, past conflict, and hostilities. Can companies and Indigenous peoples really listen to each other while they listen to the earth? You have said nothing on this issue."

"Well it's a bit beyond the scope of my research, but I think it is possible through active commitment to dialogic approaches. People may not be able to 'talk' about the same things in the same ways, but if they can first accept that there are cultural differences in approaches to dialogue, then that's a step in the right direction."

"What about you Pip? Did you experience this?" asked a committee member.

"Yes," she replied, "I did. But perhaps most important, my experiences with the Cree taught me about the need to reintegrate humans back into nature. I learned that the dualistic split between myself and nature is not a necessity but still a deeply ingrained belief structure that permeates my own theoretical lens even as I struggled against it. As I end this project, I realize that my Ph.D. has been a very personalized journey, and a fight to recapture many of the things that modernity has suppressed. The tallymen of James Bay offered me a path, a management approach which has helped to lead me out of the dualism."

"Rather lofty Pip," said a voice at the back. "And what about gender issues anyway? The tallymen may have helped you reintegrate back into nature, but they also tried to make you do laundry! What do you say to that? Should male managers be in charge? Is this ecologic?"

She saw another professor write down on his paper—20 lashes for the Ph.D. student. A joke, but Pip didn't like running gauntlets. She wondered if she was starting to lose the battle. She looked at the external examiner from Cornell. He was the only Indigenous person in the room, and he held her stare for what seemed like a long time. The crow flapped her wings noisily.

"I mean, the tallyman's approach is not perfect," she said, "I admit that I had a hard time with the chauvinism. Maybe TEK can learn from advances that Western management has made, particularly in terms of gender equality, or at least a critique of gender roles in management."

One of her fellow grad students jumped in,

"If the Cree aren't perfect, why do you think we can be? Aren't you being romantic? Shouldn't this dissertation be in anthropology anyway?"

The anthropologist smiled at the idea of romance but said nothing. Pip replied,

"No. The bush isn't romantic. It's hard."

Pip knew this wasn't much of an answer. She thought about all those blood poems she had published. She also thought about the time she fell in the river and nearly died. She was quiet for a few moments.

Sensing a disquiet in this silence, a grad student offered her a bridge,

"You know Pip, Shrivastava (1994) recommended that we stop looking at the environment from the organization, and instead, try to understand the organization from the perspective of the natural environment. You might consider how the tallyman helps to lead the way to this new perspective."

"Yes, you're absolutely right," Pip said thoughtfully, "And I think that in order to do this, we have to get off the road, metaphorically but also in a tangible sense. We have to get into the natural environment in some sort of fundamental way."

She was quiet again. The clocked ticked. Suddenly, the crow flew in the room, made a swooping dive, and exited like a rocket into the courtyard. It settled momentarily in a pine tree, cawed twice, and flew off. It was gone. Pip stood and looked for a few moments at the window ledge. Eco barked again, and she saw that he was leaving too. These events seemed to give her inspiration.

> "It's like something I read by Walking Buffalo," she said, "from the Stoney Nation. He said that 'Hills are always more beautiful than stone buildings, you know. Living in a city is an artificial existence. Lots of people hardly ever feel real soil under their feet, see plants grow except in flowerpots, or get far enough beyond the streetlight to catch the enchantment of a night sky studded with stars. When people live far from the scenes of the Great Spirits' making, it's easy for them to forget his laws.'" (Walking Buffalow, 1958)

Suddenly, a light went on inside her head.

> "Yeah, it's not about whether we can become Indian, but it is about going native, . . . And I think we all have this capacity, this little bit of undomesticated DNA that can be reaccessed if we integrate ourselves back into nature. It's like what John Livingston (1994), that Professor Emeritus at York, said: 'In theory at least, we all retain the capacity for wildness. In practice, we cling limpet like to the ideology of dualism, we deny the virtues of wildness, and we deny its accessibility to us.'"
> "Hey! Maybe we can reorient ourselves," said the grad student. "Maybe we have to learn to describe the wildering of management."

Pip was excited now too.

> "Yes, yes! I mean why are we inside talking about this anyway? Why aren't we outside, in the forest, or at least on the grass? Why aren't we living and working out there where the crow flies? Why does a Ph.D. defense have to be inside? Why do all our business meetings always happen INSIDE?"
> "But what if it rained Pip? What if we did your defense outside, and it rained or snowed?" said a committee member.
> "Well, we'd have to adapt to the natural cycle, wouldn't we? We'd have to wear raincoats or parkas, or postpone it, or find shelter. If we were outside, we could no longer ignore ecological feedbacks about the state of the environment. We'd have to manage within them."
> "We can't understand deep ecology by simply reading and writing about it," said the speakerphone. "For God's sake, Arne Naess (1989) lives it—he lives in the mountains of Norway!"

Pip nodded enthusiastically.

> "Yes, yes, Drengson (1992) talked about how Arne Naess's physical life in the mountains of Norway was essential to the emergence of his philosophy of deep ecology."
> "Perhaps," said Bill, "this is the main point. That at a very basic level, that is the very thing that TEK would make us change. TEK would make us go outside."
> "And by doing so," Pip said, "maybe we would have to change the geography of our minds."

From the speakerphone, the voice from England spoke again,

> "That's right! That's right! We can't learn ethnography by reading about Gadamer (2001) in the library! We have to go there! We have to go to the field! Indigenaity!!!"

Pip started to conclude,

> "I think that we may need to get our heads out of our books. We need to get our conceptualizations of management out of the organization, get our theories and ourselves out of the office and into the Earth. I think we need to go outside."

Her supervisor nodded and then added.

> "Yes Pip, but it's like Lily Tomlin said, 'The trouble with the rat race is that even if you win, you're still a rat.'"

The room went silent. For a few minutes no one moved. Then Pip walked over to the window. She heard Eco barking in the distance. He seemed a long way off. The crow was nowhere to be seen. She hesitated a moment and then seemed to make a decision. Pip looked back once, smiled at her supervisor and climbed out the window. She was gone.[3]

NOTES

1. Although I accept that all narratives are "fictive" to some degree, I do adhere to the belief that there is a difference between trying to convey an imaginary experience and trying to describe (however ineptly and thus fictively) an actual experience. I accept that my interpretation of both of these experiences has fictive elements, yet continue to differentiate loosely between them as fiction and fact.

2. Dialogue can best be read in a holistic, participatory manner. In this spirit, I ask the reader to be interactive—why not participate and write your own dialogue in the margins or e-mail them back to me? E-mail: gwhiteman@fbk.eur.nl

3. My Ph.D. dissertation was held partly inside and outside the building. I made my presentation outside in the courtyard, under a tree, with the examining committee and a crow in attendance. Afterward, we went inside, and I addressed questions on the field.

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***GAIL WHITEMAN**, Ph.D., is an assistant professor at the Department of Business-Society Management at Erasmus University in the Netherlands. She earned her Ph.D. in management from Queen's University in Canada.*

I entered James Bay as a 29-year-old White urban professional, a newly formed environmentalist who was searching for a dissertation topic. I grew up in the suburbs outside Toronto—I had never hunted or trapped. I had never imagined that I would ever do so. I was not "outdoorsy." But I wanted an adventure and the remoteness of James Bay was enticing.

I wanted my doctoral research to change me, and it did. In fundamental ways, I entered James Bay with a romanticized, and sanitized, perspective of "Nature" with a capital "N." I was looking for beauty and harmony. I found those qualities but also found danger and complexity. My romanticization of the Cree developed while I was in the bush—when I began to learn about the depth of Freddy's knowledge. However, through time, self-reflection and painful personal experiences, I began to critically assess my own beliefs. From my experiences with the Cree, I learned that I was not used to the natural environment, that I had spent most of my life perpetuating a modernist dilemma that attempts to separate Humans from Nature. I also learned that this distinction was not a necessity. Instead, I found that it could be viewed as a deeply ingrained belief structure that permeated my own theoretical lens, despite a commitment to environmentalism. However, I found that I could break through this dichotomy and pursue a more organic approach to managerial "sense-making" after an extended immersion in the bush.

Freddy and his family, like other Cree, were trying to manage successfully. Bush life was practical and graphic—there was no time or space for romantic notions. I lived with people and I learned from them. During my fieldwork, I have seen animals die; I have been part of this activity. I have had blood on my hands; in fact, all the way up my arms and down my shirt front. I have cried about this on more than one occasion. Many shocking things happened. That is "true" but what it all means is debatable. My findings discuss many aspects of Cree management, but I do not position myself as an objective expert. All I offer is an informed opinion, a narrative that is grounded in the (semi) "reality" of my research and my life experience.